

Heslop-Harrison, *Stain Techn.* 45:115-120, 1970). Both pin and thrum forms produced viable pollen (over 40% in all counts).

Segregated pin and thrum plants were self- and cross-pollinated in both directions. Seed was set in all cases, showing both floral morphs to be female fertile and self-compatible. The potential for natural selfing was examined by maintaining mixed and segregated pin and thrum plants in an open garden. The mixed group set an average of 0.27 seeds per flower ($n = 200$), whereas the segregated groups yielded no seed at all. This suggests that the mechanical characteristics of *S. brandegei* floral morphology discourage selfing in wild populations, despite the fact that the species is self-compatible.

Heterostyly is known in only 24 angiosperm families (Ganders 1979) and has not previously been reported in the Lamiaceae. It is rarely found in self-compatible species and, except for an unsubstantiated report by Darwin from the Verbenaceae (The Different Forms of Flowers on Plants of the Same Species, 1877, John Murray, London), the occurrence of heterostyly in *S. brandegei* is the first substantiated case for any zygomorphic dicotyledonous plant.—KURT R. NEISESS, Department of Botany, University of Texas, Austin, 78712. (Received 25 Nov 1983; accepted 16 Apr 1984.)

NOTEWORTHY COLLECTIONS

MONTANA

ALLIUM PARVUM Kell. (LILIACEAE).—Ravalli Co., open slopes, Painted Rock's cliffs, W. Fork Bitterroot River, 1710 m, 15 Jun 1975, *J. Cory 1447* (MONTU); steep w.-facing slope above E. Fork Bitterroot River just s. of Spring Gulch Cmpg. (T1N R20W S7), 1330 m, 22 May 1983, *Lesica and Moore 2582* (MONTU, ID). (*Lesica and Moore 2582* verified by D. Henderson, ID.)

Significance. First record for MT.

ASTRAGALUS CERAMICUS var. *APUS* Barneby (FABACEAE).—Beaverhead Co., Centennial Valley, blowout areas in sandhills 40 km ne. of Monida (T13S R2W S23), 2010 m, 11 Jul 1983, *Lesica 2716* (MONTU, NY). (Verified by R. C. Barneby, NY.)

Significance. First record for MT.

ASTRAGALUS CHAMAELEUCE Gray (FABACEAE).—Carbon Co., dry flats 1 km ne. of Gyp. Springs 16 km n. of Cowley, WY (T9S R27E S33), 1370 m, 18 Jun 1983, *Lesica 2623* (MONTU, NY). (Verified by R. C. Barneby, NY.)

Significance. First record for MT.

ASTRAGALUS MOLYBDENUS Barneby (FABACEAE).—Teton Co., E. Front mountains, Mount Wright (T26N R10 W S25), 2240 m. Dense growth in horizontal strips on mostly stabilized slide. 23 Jul 1982, *Lackschewitz and Ramsden 10062* (MONTU, NY). (Collection det. by R. Barneby, NY.)

Significance. Previously known only in the high southern Rocky Mts. of Colorado, roughly 960 air-km to the s.

ATHYSANUS PUSILLUS (Hook.) Greene (BRASSICACEAE).—Ravalli Co., Bitterroot Mts., n. side of Blodgett Canyon, 5.6 km wnw. of Hamilton (T6N R21W S16 sw.¼), sparse, at the base of cliff, 1341 m, 25 Apr 1981, *Vincent 355* (MRC). (Verified by P. Stickney, MRC); Blodgett Canyon, above parking lot below rock cliffs (T6N R21W S16 sw.¼), locally common, on granitic ledges, aspect 190, overall slope 70%, ledge slope 10%, 1400 m, 24 May 1983, *Pierce and Vincent 1158* (MONTU).

Significance. First report from MT.

CAREX AMPLIFOLIA Boot. (CYPERACEAE).—Sanders Co., Vermillion Road, nw. of Thompson Falls in moist area of Roe Gulch, ca. 4 km upstream from Clark Fork River (T24N R31W S12 nw.¼ of sw.¼), 763 m, *Thuja plicata-Betula occidentalis* habitat in Douglas-fir/Ponderosa pine forest, 10 Aug 1978, *Ramsden 268* (MONTU, NY). (Confirmed by A. Cronquist, NY.)

Significance. First report from MT.

CAREX INCURVIFORMIS Mack. (CYPERACEAE).—Teton Co., E. Front mountains, above "Our Lake" (T24N R9W S18), 2285 m, 12 Jul 1981, *Lackschewitz 9606* (AK, MONTU, NY). (Verified by A. Cronquist, D. Murray, NY.)

Significance. Second record from MT, ca. 230 km n. of first known occurrence in the Anaconda-Pintlar Mts.

CAREX LIVIDA (Wahl.) Willd. (CYPERACEAE).—Teton Co., open fen w. of Pine Butte, 40 km w. of Choteau (T24N R7W S18), 1400 m, 24 Jul 1982, *Lesica 2316* (MONTU, NY). (Verified by A. Cronquist, NY.)

Significance. Second record for MT and the Northern Rocky Mtn. region.

CIRSIUM SUBNIVEUM Rydb. (ASTERACEAE).—Madison Co., slope of Ruby Mountain Ridge above Laurin Canyon (T6S R5W S9 sw.¼), 2600 m, open places in subalpine forest, 21 Aug 1982, *Lackschewitz and Rosentreter 10282* (MONTU, NY). (Det. by A. Cronquist, NY.)

Significance. First report for MT.

DRABA FORSILDII G. A. Mulligan (BRASSICACEAE).—Carbon Co., Beartooth Mts., steep n.-facing slope along Hwy. 212, 16 km sw. of Red Lodge (T9S R19E S17), 2750 m, 2 Jul 1981, *Lesica 1496* (MONTU, DAO); Beartooth Mts., ridge 1 km e. of Silverrun Pk. (T8S R18E S20), 3550 m, 15 Aug 1981, *Lesica 1786* (MONTU, DAO). (Det. by G. A. Mulligan, DAO.)

Significance. First record for contiguous U.S., an extension of ca. 800 km s. from Alta.

ERIGERON ASPERUGINEUS (Eat.) Gray (ASTERACEAE).—Beaverhead Co., Lima Peaks, steep w.-facing slope of Mt. Garfield, 16 km s. of Lima (T15S R9W S13), 2690 m, 11 Aug 1983, *Lesica 2794* (MONTU, NY). (Verified by A. Cronquist, NY.)

Significance. First record for MT.

IDAHOA SCAPIGERA (Hook.) Nels. & Macbr. (BRASSICACEAE).—Ravalli Co., Bitterroot Mts., Blodgett Canyon, above parking lot below rock cliffs (T6N R21W S16 sw.¼), locally common, on granitic ledges, aspect 190, overall slope 70%, ledge slope 10%, 1400 m, 3 Jun 1983, *Pierce, Lackschewitz, Vincent and Bradley 1164* (MONTU).

Significance. First record for MT.

JUNCUS ACUMINATUS Michx. (JUNCACEAE).—Teton Co., pond e. of Pine Butte, 40 km w. of Choteau (T24N R7W S17), 1370 m, 26 Jul 1982, *Lesica 2337* (MONTU, NY). (Det. by A. Cronquist, NY and F. J. Hermann, WIS.)

Significance. First record for MT.

LOMATIUM GEYERI (S. Wats.) Coult. & Rose (APIACEAE).—Lincoln Co., rock ledges at Yaak Falls, 19 km n. of Troy (T33N R33W S4), 730 m, 2 Jun 1982, *Lesica 1941* (MONTU, CA). (Det. by L. Constance, CA.)
Significance. First record for MT.

MACHAERANTHERA COMMIXTA Greene (ASTERACEAE).—Madison Co., crest of Ruby Mtn. ridge above Laurin Canyon (T6S R5W S9 sw.¼), 2700 m, near krummholz of *Pinus albicaulis* and in association with *Poa interior* and *Townsendia montana*, 21 Aug 1982, *Lackschewitz and Rosentreter 10291* (MONTU, NY). (Det. by A. Cronquist, NY.)
Significance. First report from MT.

OENOTHERA PALLIDA Lindl. var. IDAHOENSIS Munz. (ONAGRACEAE).—Beaverhead Co., Centennial Valley, blowout areas in sandhills 40 km ne. of Monida (T13S R2W S23), 2010 m, 11 Jul 1983, *Lesica 2713* (MONTU, NY). (Verified by A. Cronquist, NY.)
Significance. First record for MT.

OROBANCHE CORYMBOSA (Rydb.) Ferris (OROBANCHACEAE).—Beaverhead Co., Big Hole Valley, Big Hole National Battlefield, steppe s. of siege area (T2S, R17W, S23), 1920 m, 3 Aug 1980, *Pierce 981* (MONTU). (Verified by L. R. Heckard, JERS.)
Significance. First record for MT.

PENSTEMON PAYETTENSIS Nels. & Macbr. (SCROPHULARIACEAE).—Ravalli Co., Jew Mtn., 5 km e. of Painted Rock Reservoir (T2S R19E S8), 1670 and 1820 m, 9 Jul 1976, *Cory 1640* (ID, MONTU, NY, WTU). (Verified by D. Henderson, ID and N. Holmgren, NY.)
Significance. First report for MT.

PHIPPSIA ALGIDA R. Br. (POACEAE).—Carbon Co., Beartooth Mts. wet gravel bars below snowbank (T9S R19E S23), 2990 m, 12 Aug 1980, *Dorn 3586* (MONT); wet gravel on gentle slope of Silverrun Plateau (T8S R18E S23), 3200 m, 14 Aug 1981, *Lesica 1767* (MONTU, MONT, COLO); gravelly soil along streams on E. Rosebud Plateau (T8S R17E S2), 3510 m, 26 Aug 1983, *Lesica 2868* (MONTU). (*Lesica 1767* verified by W. A. Weber, COLO.)
Significance. First report for MT.

PLAGIOBOTHRYUS LEPTOCLADUS (Greene) Johnson (BORAGINACEAE).—Phillips Co., muddy shore of pond (T22N R25E S17), 975 m, 20 Aug 1978, *Lackschewitz 8605* (MONTU, NY). (Det. by A. Cronquist, NY.)
Significance. First confirmed report from MT. (Coll. in 1874 “reportedly from Montana.”)

PLANTAGO CANESCENS Adams (PLANTAGINACEAE).—Glacier Co., gently rolling glacial drift 7 km e. of Glacier Natl. Park, 23 Jul 1953, *Wright and Anderson* (MONT); Pondera Co., 8 km w. of Dupuyer on both sides of the road to Swift Reservoir, scattered colonies in dry prairie (T28N R8W S24 sw.¼), 1430 m, 13 Jul 1983, *Lackschewitz 10484* (MONTU, NY); Teton Co., grasslands 1 km n. of Bowman Range, 40 km w. of Choteau (T24N R7W S3), 1490 m, 24 Jun 1982, *Lesica 2097* (MONTU, NY); 26 Jul 1982, *Lesica 2350* (MONTU, NY). (Collections deposited at NY, verified by A. Cronquist, NY.)
Significance. Second report for MT and contiguous U.S. First record (*Umbach 377* MONT, NY) was questioned (Hitchcock et al., *Vascular Plants of the Pacific Northwest Part 4*, p. 443, 1959).

POTENTILLA BREVIFOLIA Nutt. (ROSACEAE).—Madison Co., Madison Range, steep slope s. of Expedition Pass, 30 km nw. of West Yellowstone (T10S R2E S15), 3080 m, 17 Aug 1983, *Lesica and DeBolt 2842* (MONTU, NY). (Verified by A. Cronquist, NY.)

Significance. First report for MT, an extension of ca. 130 km n. from the Teton Range, ID-WY.

SAXIFRAGA CHRYSANTHA Gray (SAXIFRAGACEAE).—Stillwater Co., Beartooth Mts., alpine fellfield 3 km ne. of Granite Pk., 22 km ne. of Cooke City (T7S R16E S29), 3570 m, 31 Aug 1973, *M. C. Stickney 9* (NRC); Carbon Co., Beartooth Mts., tundra on s.-facing slope 1 km se. of Silverrun Pk. (T8S R18E S20), 3600 m, 15 Aug 1981, *Lesica 1778* (MONTU, MONT); gravelly soil on the e. Rosebud Plateau (T8S R17E S2), 3540 m, 26 Aug 1983, *Lesica 2872* (MONTU).

Significance. First report for MT.—KLAUS H. LACKSCHEWITZ, PETER LESICA, JOHN PIERCE, Dept. Botany, Univ. Montana, Missoula 59812, JACULYN K. CORY, SW581 Westside Rd., Hamilton, MT 59840 and DAVID RAMSDEN, 7075 Hale, Plano, IL 60545.

UTAH

DRABA INCERTA Pays. (BRASSICACEAE).—Cache Co., crest of Bear River Range, ridge sw. of Boss Canyon, ca. 3066 m (T14N R3E S31), e.-facing slope, growing on soils derived from Laketown Dolomite, with *Pteryxia hendersonii* and *Astragalus kentrophyta*; 28 Jun 1981, *Neely 461* (UTC). Doubletop Mtn., Bear River Range (T14N R3E S7), ca. 3256 m, w.-facing slope below summit on rocky dolomitic soils, rare, with *Pteryxia hendersonii* and *Draba oligosperma*; 24 Jul 1982, *Neely and Carpenter 1042* (UTC, BYR).

Significance. These collections represent a range extension of ca. 140 km e. of the only other known collection in Utah. The first was made in 1928 by W. Cottam (BYR, in flower only) in the Raft River Mts., Box Elder Co. This recent collection site is ca. 230 km from the nearest known site at Hall's Mtn. in the Wind River Mts., WY and ca. 330 km from a known collection site at Gunsight Pk. in the Lemhi Range, ID.—ELIZABETH E. NEELY, Forestry Sciences Laboratory, 860 N 1200 E, Logan, UT 84321 and ALAN T. CARPENTER, Dept. of Range Science, Utah State University, Logan 84322.

WYOMING

OXYTROPIS PODOCARPA Gray (FABACEAE).—Sublette Co., Wind River Mts., saddle northwest of Hall's Mtn. (T33N R6W S32), exposed nw.-facing slope at ca. 3900 m, on rocky granitic soils, growing in small patches, with *Draba crassa*, *Chaenactis alpina* and *Astragalus alpinus*; 18 Aug 1982, *Neely and Carpenter 1078* (UTC, WYAC).

Significance. This is the second collection of this species in WY. The first was made by F. Tweedy (NY) in Aug 1897 on Yount's Pk., Park Co. in the Absaroka Mts. on volcanic soils. This collection represents a range extension of ca. 100 km se. of the only other known collection in WY.—ELIZABETH E. NEELY, Forestry Sciences Laboratory, 860 N 1200 E, Logan, UT 84321 and ALAN T. CARPENTER, Dept. of Range Science, Utah State University, Logan 84322.